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CLAIM AMENDMENTS

Please amend claims 1, 2, 3, 4, 6, 11, 13, 14, 15, 17, and 19 as follows:

1. (Currently Amended) A vehicle door latch communications system, comprising:

~~a host computer and a wireless network;~~

a communications receiver and transmitter unit associated with a vehicle door latch, wherein said communications receiver and transmitter unit comprises a wireless communications component for communicating with ~~a said~~ host computer via ~~a said~~ wireless network;

an interface component for interfacing with said communications receiver and transmitter unit, wherein said interface component is co-located with said communications receiver and transmitter unit in association with said vehicle door latch;

an interpreter associated with said interface component and said communications and transmitter unit, wherein said interpreter processes information received from said communications receiver and transmitter unit in order to provide latch diagnostics and functionalities; and

a bi-directional communications protocol, which allows for the receiving of latch status and operational information and data during any operational cycles of said vehicle door latch and for allowing the transmitting of any vehicle latch command to said vehicle door latch, thereby permitting active debugging of said vehicle door latch without the use of a vehicle computer.

2. (Currently Amended) The system of claim 1 wherein said wireless network comprises at least one of the following types of wireless networks: a personal area network, a GSM network, a GPRS network, a CDMA network, ~~a paging network~~, a

TDMA network, a CDPD network, a WIN network, an 802.11 network, or a wireless communications protocol network.

3. (Currently Amended) The system of claim 1 wherein said wireless communications component includes an antenna and associated wireless communications circuitry for receiving and transmitting data per a desired frequency, including said bi-directional communications protocol.

4. (Currently Amended) The system of claim 1 wherein said communications receiver and transmitter unit further comprises a direct wire connection for communicating data to and from said interpreter and wherein said bi-directional communications protocol comprises a general packet format in association with said bi-directional communications protocol, wherein said general packet format comprises at least two different packet types including a debug information packet that provides debug information and a version information packet that provides version information.

5. (Original) The system of claim 4 wherein said direct wire connection comprises a voltage level shifter for transforming voltage levels for communication with said interface component.

6. (Currently Amended) The system of claim 1 wherein:

said bi-directional communications protocol comprises a general packet format in association with said bi-directional communications protocol, wherein said general packet format comprises at least two different packet types including a debug information packet that provides debug information and a version information packet that provides version information; and

said Interface component comprises a Universal Asynchronous Receiver/Transmitter (UART) which can receive and transmit data serially from said communications receiver and transmitter unit and receive and transmit data in parallel with said interpreter.

7. (Original) The system of claim 6 wherein said UART comprises a hardware component separate from said interpreter.

8. (Original) The system of claim 6 wherein said UART is integrated with said interpreter.

9. (Original) The system of claim 8 wherein said interpreter comprises a microprocessor that processes data received from said UART.

10. (Original) The system of claim 8 wherein said interpreter comprises a logic array that performs a particular function based on particular data received from said UART.

11. (Currently Amended) A vehicle door latch communications system, comprising:
a communications receiver and transmitter unit associated with a vehicle door latch;

an interface component for interfacing with said communications receiver and transmitter unit, wherein said interface component is co-located with said communications receiver and transmitter unit in association with said vehicle door latch;

an interpreter associated with said interface component and said communications and transmitter unit, wherein said Interpreter processes information received from said communications receiver and transmitter unit in

order to provide latch diagnostics and functionalities for said vehicle door latch, wherein said interpreter comprises a logic array that performs a particular function based on particular data received from said interface component; and

a wireless communications component for wirelessly communicating data between said communications receiver and transmitter unit and a host computer via a wireless network; and

a bi-directional communications protocol, which allows for the receiving of latch status and operational information and data during any operational cycles of said vehicle door latch and for allowing the transmitting of any vehicle door latch command to said vehicle door latch, thereby permitting active debugging of said vehicle latch without the use of a vehicle computer.

12. (Original) The system of claim 11 wherein said interface component comprises a Universal Asynchronous Receiver/Transmitter (UART) which can receive and transmit data serially from said communications receiver and transmitter unit and receive and transmit data in parallel with said interpreter.

13. (Currently Amended) The system of claim 11 wherein ~~said latch comprises a vehicle door latch~~ said bi-directional communications protocol comprises a general packet format in association with said bi-directional communications protocol, wherein said general packet format comprises at least two different packet types including a debug information packet that provides debug information and a version information packet that provides version information.

14. (Currently Amended) A vehicle door latch communications method, comprising the steps of:

providing a host computer and a wireless network;

associating a communications receiver and transmitter unit with a vehicle latch, wherein said communications receiver and transmitter unit comprises a wireless communications component for communicating with said host computer via said wireless network;

establishing an interface component for interfacing with said communications receiver and transmitter unit, wherein said interface component is co-located with said communications receiver and transmitter unit in association with said vehicle door latch; ~~and~~

associating an interpreter with said interface component and said communications and transmitter unit, wherein said interpreter processes information received from said communications receiver and transmitter unit in order to provide latch diagnostics and functionalities; ~~and~~

providing a bi-directional communications protocol, which allows for the receiving of latch status and operational information and data during any operational cycles of said vehicle door latch and for allowing the transmitting of any vehicle latch command to said vehicle door latch, thereby permitting active debugging of said vehicle door latch without the use of a vehicle computer.

15. (Currently Amended) The method of claim 14 further comprising the step of configuring said wireless network to comprise at least one of the following types of wireless networks: a personal area network, a GSM network, a GPRS network, a CDMA network, ~~a paging network~~, a TDMA network, a CDPD network, a WIN network, an 802.11 network, or a wireless communications protocol network.

16. (Previously Amended) The method of claim 14 further comprising the step of configuring said wireless communications component to include an antenna and associated wireless communications circuitry for receiving and transmitting data per a desired frequency.

17. (Currently Amended) The method of claim 14 wherein further comprising the steps step of:

configuring said communications receiver and transmitter unit to further comprise a direct wire connection for communicating data to and from said Interpreter; and

configuring said bi-directional communications protocol to comprise a general packet format in association with said bi-directional communications protocol, wherein said general packet format comprises at least two different packet types including a debug information packet which provides debug information and a version information packet that provides version information.

18. (Original) The method of claim 17 further comprising the step of configuring said direct wire connection to comprise a voltage level shifter for transforming voltage levels for communication with said interface component.

19. (Currently Amended) The method of claim 14 further comprising the steps step of:

configuring said interface component to comprise a Universal Asynchronous Receiver/Transmitter (UART) which can receive and transmit data serially from said communications receiver and transmitter unit and receive and transmit data in parallel with said Interpreter; and

configuring said bi-directional communications protocol to comprise a general packet format in association with said bi-directional communications protocol, wherein said general packet format comprises at least two different packet types including a debug information packet which provides debug information and a version information packet that provides version information.

20. (Original) The method of claim 19 further comprising the step of embedding said interpreter, said UART, and said communications receiver and transmitter unit within said latch, wherein said comprises a vehicle door latch.